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E6M1/1226

LOWE PRICE LEBLANC AND BECKER SUITE 300 99 CANAL CENTER PLAZA ALEXANDRIA VA 22314

DATE MAILED: 12/26/96

This is a communication from the examiner in charge of your application. . COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY	
Responsive to communication(s) filed on June 7, 1995	
☐ This action is FINAL.	
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 D.C. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expire	
Disposition of Claims	
Claim(s) /-Z6 is/are pending in the application. Of the above, claim(s) is/are withdrawn from consideration. Claim(s) /-8 and 24-26 is/are allowed. Claim(s) 9,12,(5,17, and 19 is/are rejected. Claim(s) 10,11,13,14,16,18, and 20-23 is/are objected to. Claim(s) are subject to restriction or election requirement.	
Application Papers	
See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. ☐ The drawing(s) filed on	
Priority under 35 U.S.C. § 119	
Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been	
received. received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 17.2(a)).	
*Certified copies not received:	
Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s)	
☑ Notice of Reference Cited, PTO-892	
Information Disclosure Statement(s), PTO-1449, Paper No(s).	
Interview Summary, PTO-413	
Notice of Draftperson's Patent Drawing Review, PTO-948 Substitute	
Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

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DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: The original declaration must be submitted.

Specification

- 2. There are many misspellings throughout the specification. Correction is requested.
- The disclosure is objected to because of the following informalities: On page 9, line 23, color space converter (reference numeral 36 in Fig. 2) is being referred to as reference numeral 34. Also, on page 10, line 16, "greater" should be changed to "less", and on page 10, line 30, "below "should be changed to "above". Finally, on page 11, lines 35-36, the fourth AND gate should be reference numeral 64, and not 62 (which is the third AND gate) as stated.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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5. Claims 9, 12, 15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malcolm, Jr. et al. (5,258,750) in view of Bryden (4,251,755), Kageyama (5,196,937), and Krivacic (5,572,238).

Under claims 9, 12, 15, 17, and 19, Malcolm et al. disclose, in column 1, lines 61-67, and Fig. 1B-1, a video/graphics system which is able to position video in selected regions of the associated display screen and control the brightness for variable fade-in and fade-out of the video. Also, in FIG. 1B-1 there is a graphics controlling means 26. Also, Malcolm et al. disclose, in Figures 4 and 5, and in column 7, lines 10-20, a video processor 40 that formats the supplied image data into a format containing a luminance value, and a video processor (VCU) that comprises color converting means that generate the red, green, and blue output signals for each pixel. Next, Malcolm et al. teach, in column 5, lines 1-30, a computer that is commonly capable of providing image data to a video memory, and a frame buffer 50 (video memory). Finally, Malcolm et al. disclose, in column 13, lines 7-17, a window control module 129 that generates either a "select graphics" signal or a "select video" signal in a sequence controlling in this way the timing. However, Malcolm et al. do not disclose in his video/graphics system (which controls the brightness) a brightness value being added to the value of the pixels of the image data and clamping values of any of the brightness adjusted pixels that fall below the lowest output pixel value to the lowest output pixel value, and values of any of the brightness adjusted pixels that are above a highest output pixel value to the highest output pixel value. Finally, Malcolm et al. do not disclose that the output from the video/graphics system is displayed in an LCD.

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Bryden discloses, in the abstract, and Fig. 1, a digitally controlled display system wherein the digital video is added to a digital brightness code and the sum is converted to an analog signal that is coupled to a CRT. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add a digital brightness code to the digital video, as taught by Bryden, in the apparatus of Malcolm et al. because adding a brightness code to the digital video information is useful in optimizing the luminance of the display. Kageyama discloses, in the abstract, and Fig. 1., a contrast correction device that includes a brightness/darkness detecting circuit for producing a bright signal when the tone level is greater than a predetermined brightness, and a dark signal when the tone level is less than a predetermined darkness; a correction circuit is provided for correcting a luminance signal by a negative gamma correction in response to the bright signal, and a positive gamma correction in response to the dark signal. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the correction circuit, as taught by Kageyama, in the combined apparatus of Malcolm et al. and Bryden because the correction circuit is useful in restricting, or clamping, the brightness values to a predetermined brightness and the darkness values to a predetermined darkness, enhancing so the contrast of the output image. Krivacic teaches, in column 2, lines 39-52, a video display terminal that is also suitably comprised in any graphical display device such as an LCD. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the LCD, as taught by Krivacic,

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in the combined apparatus of Malcolm et al., Bryden, and Kageyama because the LCD weighs less and is easier to handle than a CRT, for example.

Allowable Subject Matter

- 6. Claims 10-11, 13-14, 16, 18, and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Claims 1-8, and 24-26 are allowed.
- 8. The following is an examiner's statement of reasons for allowance: Claims 1-8, and 24-26 are considered allowable since the prior art made of record and considered pertinent to the applicant's disclosure: Malcolm, Jr. et al., Bryden, Kageyama, Krivacic, Kondo et al. (5,321,513), Siann et al. (5,406,306), and Dwin et al. (5,517,612), taken individually or in combination do not teach the limitations of a brightness adjustment arrangement comprising an adder that adds a brightness value to digital pixel values to produce adjusted pixel values and a carry-out signal; a lower clamp circuit that receives the carry-out signal and at least one bit of the brightness adjusted values and clamps the adjusted pixel value to a lowest output value when the addition produces a pixel value below the lowest output pixel value and an upper clamp circuit that receives the carry-out signal and at least one bit of the brightness value and clamps the adjusted pixel values to a highest value when the addition produces a pixel value above the highest output pixel value.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo Osorio whose telephone number is (703) 305-1981. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for this Group is (703) 305-3989.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Ricardo Osorio

December 16, 1996

RICHARD HJERPE SUPERVISORY PATENT EXAMINER

GROUP 2600